LABORATORY

OF THE

INLAND REVENUE DEPARTMENT

OTTAWA, CANADA

BULLETIN No. 225

BLACK ANTIMONY.

7534—1

LABORATORY

OF THE

INLAND REVENUE DEPARTMENT

OTTAWA, CANADA

BULLETIN No. 225

BLACK ANTIMONY.

OTTAWA, July 18, 1911.

W. J. GERALD, Esq.,
Deputy Minister of Inland Revenue.

SIR,—Some time ago representations were made to this Department to the effec that the drug known as Black Antimony was grossly adulterated. In consequence o this, a collection of 77 samples was made during March, April and May of this year and the following report gives the results of their examination; and it will be seen that the charges of gross adulteration are fully sustained. The following synopsi gives these results in brief:—

	Samples.
Adulterated, as containing no antimony	21
Very impure sulphide of antimony	9
Impure sulphide of antimony	8
Sulphide of antimony	39
	77

Black Antimony is not defined by the British Pharmacopoeia; but the purifie sulphide is defined as Antimonium Nigrum Purificatum. This is the crude sulphid separated from siliceous material and from arsenical compounds.

Neither is Black Antimony found in the United States Pharmacopoeia, since 1890 In the seventh decennial revision of the U.S.P. it is thus described:—

"Native Antimony Sulphide, purified by fusion, and as free from arsenic a possible."

Under the designated tests it is required to dissolve in hydrochloric acid, withou leaving more than one (1) per cent of residue. The United States National Dispen satory, 5th Edition, p. 223, describes it as dissolving in 10 parts of hydrochloric acid without leaving more than 1 per cent of residue.

Finlay Dun (Veterinary Medicines, 9th Edition, p. 246), says:—"The sulphide or stibnite, the most abundant ore of antimony, when purified by fusion, occurs i dark-grey, metallic, heavy brittle cakes, or as a heavy grey black, crystalline powder devoid of odour and taste, insoluble in water, and known as black, or crude antimony."

Black antimony is not now employed in human medicine, but very largely used as an alterative and anthelmintic for horses and cattle; and is an ingredient of very many condition powders.

From what I have said, it is apparent that no exact standard of purity exists for this article. It is, however, quite certain that it should be essentially the sulphide of antimony, known as stibnite; and I have no hesitation in describing the samples examined as adulterated when they contain no antimony whatever. This is the case with 21 samples, or 27 per cent of the entire collection. Where foreign matter to the extent of nearly 50 per cent is present, I have declared the samples to be *very impure*; and where more than 5 per cent of matters insoluble in hydrochloric acid is found, as *impure*.

It is quite evident that many of the adulterated samples, consisting as they do of metallic iron, silica and carbon (graphite) have had an origin such as to preclude the possibility of any honestly mistaken intent; and are entirely and knowingly frauds, not necessarily known as such to the immediate vendor, but certainly known to the original producer.

I beg to recommend publication of this report as Bulletin No. 255.

I have the honour to be, sir,

Your obedient servant,

A. McGILL,
Chief Analyst.

BULLETIN No. 22—BLACK ANTIMONY.

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost. Quantity.	Cost. Cents.	Name and Address of Manufacturer or Furnisher as given by the Vendor. Manufacturer.	Name and Address of Manufacturer or Furnisher as given by the Vendor. Furnisher.	Inspector's Report. (Is not an expression of opinion).	Results of Analysis. Residue insoluble in HCl.	Results of Analysis. Antimony.	No. of Sample.	Remarks and Opinion of the Chief Analyst.
DISTRICT OF NOVA SCOTIA—R. J. WAUGH—INSPECTOR.												
1911.									p.c.			
Apr. 18	Black Antimony..	42271	G. C. McDougall, Kentville, N.S.	1½ lb.	30	Unknown.....	.....	.....	1·00	.....	42271	Essentially sulphide of antimony.
" 20	"	42272	L. C. Gardener, Yarmouth, N.S	1½ "	25	"	N. D. & C. Co., Halifax, N.S.	.....	1·55	.....	42272	" "
" 24	"	42273	Nat. Drug & Chem. Co., Halifax, N.S	1½ "	25	"	N. D. & C. Co., Montreal.	.....	2·05	.....	42273	" "
" 24	"	42274	Brown Bros. & Co. Halifax, N.S.	1½ "	30	"	N. D. & C. Co., Halifax.	.....	1·95	.....	42274	" "
" 25	"	42275	A. A. Thompson, Halifax, N.S.	1½ "	37	"	N. D. & C. Co., Halifax.	.....	1·30	.....	42275	" "
DISTRICT OF PRINCE EDWARD ISLAND—THEO. MOORE—INSPECTOR.												
Apr. 6	Black Antimony..	46051	J. G. Jamieson, Charlottetown.	1½ lb.	45	.....	Lymen & Sons, Montreal.	.....	1·40	.....	46051	Essentially sulphide of antimony.
" 7	"	46052	McKinnon Drug Co., Charl'town.	1½ "	45	.....	Lymans Ltd., Montreal.	.....	1·45	.....	46052	" "
" 11	"	46053	J. C. Ferguson, Souris.	1½ "	45	.....	Nat. Drug Co., Halifax.	.....	6·00	.....	46053	Impure sulphide of antimony.
" 24	"	46054	Keir & McFadyen, Kensington.	1½ "	40	.....	Nat. Drug & Chem. Co., St. John, N.B.	.....	21·00	.....	46054	Highly impure sulphide of antimony.
" 25	"	46055	A. W. P. Gourlie, Summerside.	1½ "	45	.....	Nat. Drug Co., Halifax.	.....	52·30	None.	46055	Adulterated.

"	31	"		Kensington.	½	"		.....	Co., St. John, N.B.	.....			de of antimony.
"	25	"	46055	A. W. P. Gourlie, Summerside.	1½	"	45	.....	Nat. Drug Co., Halifax.	.....	52·30	None.	46055	Adulterated.

DISTRICT OF NEW BRUNSWICK—JAS. FERGUSON—INSPECTOR.

Apr.	3	Black Antimony..	45474	The Can'dian Drug Co. Ltd., St. John, N.B.	1½	lb.	15	R. Hilliers Bros. & Co., New York, U.S.	.....	.....	1·90	...	45474	Essentially sulphide of antimony.
"	3		45475	A. C. Smith & Co., St. John, N.B.	1½	"	25	.....	Nat. Drug & Chem. Co. Ltd., St. John, N.B.	.....	43·90	None.	45475	Adulterated.
"	4	"	45476	E. Clinton Brown, St. John, N.B.	1½	"	65	.....	" "	.....	*27·60	"	45476	"
"	10	"	45477	R. T. Mack, Fredericton, N.B.	1½	"	60	.....	" "	Sold as commerciale absulute purity not guaranted.	40·40	"	45477	"
"	20	"	45478	Geo. O. Spencer, Moncton, N.B.	1½	"	38	.....	Canadian Drug Co. St. John, N.B	.....	†19·20	"	45478	"

DISTRICT OF QUEBEC—F. X. W. E. BELAND—INSPECTOR.

Mar.	28	Black Antimony..	36931	J. B. Morin, 318½ rue St. Joseph, Q.	½	lb.	13	Unknown.....	Dr. Ed. Morin & Cie.	.....	45·05	None.	36931	Adulterated.
"	30	"	36932	L. E Martel, 91 rue St. Joseph, Q.	1½	"	40	Lymans Ltd., Montreal.	Manufacturers....	.....	1·35	....	36932	Essentially sulphide of antimony.
"	31	"	36933	W. Brunet & Cie, 139 rue St. Joseph Q.	1½	"	15	Unknown.....	Unknown	.....	44·20	None.	36933	Adulterated.
Apr.	6	"	36934	Alph. Martineau, 374 rue St. Valier, Q.	1½	"	30	"	Dr. Ed. Morin & Cie.	.....	32·75	"	36934	"
"	7	"	36935	Joseph Masson, 508 rue St. Valier, Q.	1½	"	20	"	Nat. Drug Co., Montreal.	.....	97·90	"	36935	"

DISTRICT OF ST. HYACINTHE—J. C. ROULEAU—INSPECTOR.

April	24	Black Antimony..	38945	Pharmacie Chevalier, Sorel.	1½	lb.	75	.....	Lyman Knox Co., Montreal.	.....	42·95	None.	38945	Adulterated.
May	2	" ..	38946	Dr. Vaillancourt, Waterloo.	1½	"	40	.....	" ..	.....	28·50	"	38946	"
"	4	" ..	38947	John West, Magog.	1¼	"	25	Unknown	Unknown	.....	74·35	"	38947	"
"	23	" ..	38948	Dr. Leduc, Marieville.	1¼	"	30	.....	Lyman Knox Co., Montreal.	.....	50·02	.....	38948	Very impure sulphide of antimony.
"	9	" ..	38949	A. J. Bedard, Richmond.	1¼	"	50	.....	Mr. Sutherland...	.....	1·65	...	38949	Essentially sulphide of antimony.

* Contains carbonate sol. matter principally lime and magnesia.
† Contains carbonate sol. matter principally lime and magnesia.

BULLETIN No. 225—BLACK ANTIMONY.

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.		Inspector's Report. (Is not an expression of opinion).	Results of Analysis.		No. of Sample.	Remarks and Opinion of the Chief Analyst.
				Quantity.	Cents.	Manufacturer.	Furnisher.		Residue insoluble in HCl.	Antimony.		
DISTRICT OF MONRTEAL—J. J. COSTIGAN—INSPECTOR.												
1911.									p.c.			
April 6	Black Antimony..	40641	J. E. H. Quipp, 95 Windsor St., Montreal.	1½ lb.	50	Unknown	Unknown	.....	6·70	.....	40641	Impure sulphide of antimony.
" 6	" ..	40642	Joseph Contant, 221 Notre Dame East, Montreal.	1½ "	15	"	"	.....	39·05	.....	40642	Highly impure sulphide of antimony.
" 8	" ..	40643	St. Catherine Pharmacy, 20 St. Catherine St. W., Montreal.	1½ "	25	"	"	.....	1·85	.....	40643	Essentially sulphide of antimony.
" 20	" ..	40644	H. E. Archambault, 78 Notre Dame E., Montreal.	1½ "	30	.....	Lymands, Ltd., Montreal.	.....	1·25	.....	40644	" "
" 20	" ..	40645	Nat. Drug & Chem. Co., Ltd., Montreal.	1½ "	23	.....	.....	.....	1·30	.....	40645	" "
DISTRICT OF OTTAWA—J. A. RICKEY—INSPECTOR.												
Mar. 31	Black Antimony..	43241	D. J. Stalker, Druggist, Ottawa	1½ lb.	75	Unknown	Nat. Drug & Chem. Co., Ottawa.	.....	0·90	.....	43241	Essentially sulphide of antimony.
" 31	" ..	43242	T. Payment, Druggist Ottawa.	1½ "	75	"	Ottawa Drug Co., Ottawa.	.....	7·55	.....	43242	Impure sulphide of antimony.
" 31	" ..	43243	Beattie & Argue, Druggists, Ottawa.	1½ "	75	"	Nat. Drug & Chem. Co., Ottawa.	.....	94·20	None.	43243	Adulterated.

				Druggist, Ottawa					Co., Ottawa.					antimony.
"	31	"	..	43242	T. Payment, Druggist Ottawa.	1½	"	75	"	Ottawa Drug Co., Ottawa.	.....	7·55	.....	43242 Impure sulphide of antimony.
"	31	"	..	43243	Beattie & Argue, Druggists, Ottawa.	1½	"	75	"	Nat. Drug & Chem. Co., Ottawa.	.....	94·20	None.	43243 Adulterated.

April	1	"	..	43244	N. W. Campbell, Druggist, Ottawa	1½	"	75	"	Ottawa Drug Co., Ottawa.	.....	3·10	.....	43243 Essentially sulphide of antimony.
"	3	"	.	43245	Wm. Johnston, Druggist, Smith's Falls.	1½	"	75	"	Lymans, Ltd., Montreal.	.....	0·85	.....	43244 " "
"	3	"	..	43246	L. A. Wilson, Druggist "	1½	"	75	"	Unknown	.....	33·90	.....	43245 Very impure sulphide of antimony.

DISTRICT OF KINGSTON—JAS. HOGAN—INSPECTOR.

Mar.	24	Black Antimony..		47786	F. Hoag, Kingston.	½ lb.		20	.....	N. C. Polson, Kingston.	.....	52·35	None.	47786 Adulterated.
"	27	"	..	47787	J. S. McKeown, Belleville.	1½	"	40	.....	Nat. Drug Co.	.....	57·75	.....	47787 Highly impure sulphide of antimony.
"	27	"	..	47788	D. M. Waters, Belleville	1½	"	40	Unknown	.....	.....	0·70	.....	47788 Essentially sulphide of antimony.
"	28	"	..	47789	McDermid & Jury, Peterboro.	1½	"	60	.....	Lyman Bros., Toronto.	.....	4·30	.....	47789 " "
"	28	"	..	47790	Warne Drug Co., Peterboro.	1½	"	60	.....	Nat. Drug Co., Toronto.	.....	95·80	None	47790 Adulterated.

DISTRICT OF TORONTO—H. J. DAGER—INSPECTOR.

April	3	Black Antimony..		47292	Wm. Crossland, Barrie.	1½ lb.		75	.....	Drug Trading Co., Ltd., Toronto.	.....	1·20	.....	47292 Essentially sulphide of antimony.
"	3	"	..	47293	W. C. George, Orillia.	1½	"	60	.....	The Nat. Drug & Chem. Co., Ltd., Toronto.	.....	46·55	.....	47293 Very impure sulphide of antimony.
"	4	"	..	47294	J. S. Fraleigh, Midland.	1½	"	35	Unknown	Unknown	.....	69·45	.....	47294 " "
"	5	"	..	47295	C. A. Nettleton, Penetang.	1½	"	35	"	"	.....	53·45	None.	47295 Adulterated.
"	7	"	..	47296	W. J. Tuck Drug [illegible] Weston, [illegible]	1½	"	40	.....	Lyman Bros. Co., Ltd., Toronto.	.....	3·55	.....	47296 Essentially sulphide of antimony.

DISTRICT OF LONDON—JNO. TALBOT—ACTING INSPECTOR.

April	26	Black Antimony..		48010	E. O Ritz, Berlin, Ont	½ lb.		25	Unknown	Unknown	.....	6·45	.....	48010 Essentially sulphide of antimony.
"	26	"	..	48014	Clark Bros., Berlin, Ont.	½	"	15	"	"	.....	12·50	.....	48014 Impure sulphide of antimony.
"	26	"	..	48016	A. J. Roos, Berlin, Ont.	½	"	10	"	"	.....	6·40	...	48016 " "
"	26	"	..	48021	Fred. C. Bond, Galt.	½	"	25	"	"	.....	9·70	.....	48021 " "
"	26	"	..	48025	W. M. Kirk[illegible] Galt.			20	"	Nat. Drug Co., Hamilton.	.....	23·70	None.	48025 Adulterated.

BULLETIN No. 225—BLACK ANTIMONY.

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.		Inspector's Report. (Is not an expression of opinion).	Results of Analysis.		No. of Sample.	Remarks and Opinion of the Chief Analyst.
				Quantity.	Cents.	Manufacturer.	Furnisher.		Residue insoluble in HCl.	Antimony.		
DISTRICT OF WINDSOR—JNO. TALBOT—INSPECTOR.												
1911.									p.c.			
April 19	Black Antimony..	48360	W. H. Stepler, Strathroy.	½ lb.	20	Unknown	Unknown	.....	42·25	None.	48360	Adulterated.
" 20	" ..	48367	S. Tapscott & Co., Brantford.	½ "	15	"	"	.....	1·25	.....	48367	Essentially sulphide of antimony.
" 20	" ..	48372	A. W. Smiley, Brantford.	½ "	15	"	"	.....	0·90	.....	48372	" "
" 21	" ..	48377	R M. Thurtell, Ingersoll.	½ "	15	"	"	....	1·60	.....	48377	" "
" 21	" ..	48382	G. A. Ionson, Ingersoll.	½ "	15	....	Nat. Drug Co....	.....	1·45	.....	48382	" "
DISTRICT OF MANITOBA—A. C. LARIVIERE—INSPECTOR.												
May 4	Black Antimony..	43593	Brooking's Drug Store, Winnipeg	1 lb.	40	Unknown	Unknown	....	26·00	None.	43593	Adulterated.
" 4	" ..	43594	W. F. C. Brathwaite, Winnipeg	1½ "	30	"	"	.....	0·85	.....	43594	Essentially sulphide of antimony.
" 5	" ..	43595	The Nat. Drug & Chem. Co., Winnipeg.	1½ "	20	"	Nat. Drug & Chem. Co., Montreal.	.....	1·50	.....	43595	" "
" 5	" ..	43596	Andrew's Drug Store, Winnipeg	1½ "	60	"	Unknown	....	65·85	.....	43596	Very impure sulphide of antimony.
" 5	" ..	43597	Brown's Drug Store, Winnipeg	1½ "	25	"	Martin Bole & Wynne Co., Winnipeg.	Commercial ..	*62·50	None.	43597	Adulterated.

"	5	" ..	43597	Store, Winnipeg Brown's Drug Store, Winnipeg	1½ "	25	"	Martin Bole & Wynne Co., Winnipeg.	Commercial ..	*62·50	None.	43597	Adulterated.

DISTRICT OF CALGARY—R. W. FLETCHER—INSPECTOR.

May	4	Black Antimony..	43842	T. G. Caison, Edmonton.	1½ lb.	40	Martin Bole & Wynne, Winnipeg.	... .	... .	46·50	None.	43842	Adulterated.
"	4	" ..	43843	A. Archibald, Edmonton.	1½ "	40	Lymans Ltd., Montreal.	....	.. ..	1·25	.. .	43843	Essentially sulphide of antimony.
"	4	" ..	43844	G. H. Graydon, Edmonton.	1½ "	40	Lymans Ltd., Montreal.	. . ..	... ...	47·30	....	43844	Higly impure sulphide of antimony.
"	4	" ..	43845	J. H. Lives, Edmonton.	1½ "	40	Nat. Drug & Chem. Co., Calgary.	.....	.....	1·05	.....	43845	Essentially sulphide of antimony.
"	4	" ..	43846	Edmonton Drug Co., Edmonton.	1½ "	40	Lymans Ltd., Montreal.	....	.....	1·65	.....	43846	" "

DISTRICT OF NELSON—THOS. PARKER—INSPECTOR.

May	3	Black Antimony..	48420	Poole Drug Co., Nelson, B.C.	1½ lb.	60	Lymans Ltd., Montreal.	....	....	38·65	.....	48420	Impure sulphide of antimony.

DISTRICT OF VANCOUVER—J. F. POWER—INSPECTOR.

Apr.	22	Black Antimony..	38130	Nat. Drug Co., 125 Pender St., Vancouver	1½ lb.	50	.....	Vendor	....	5·70	.....	38130	Essentially sulphide of antimony.
"	22	" ..	38131	J. A. Tepoorten & Co., 330 Condora St., Vancouver.	1½ "	50	....	J. L. Hopkins, New York.	.....	2·70	.....	38131	" "
"	24	" ..	38132	L. G. Henderson, 699, Granville St, Vancouver.	1½ "	75	....	Nat. Durg Co., Vancouver.	.....	14·50	.....	38132	Impure sulphide of antimony.
"	24	" ..	38133	Lair's Drug Store, 648 Main St., Vancouver.	1½ "	50	.. ..	Nat. Drug Co., Vancouver.	... .	0·95	...	38133	Essentially sulphide of antimony.
"	24	" ..	38134	Burns & Cairns, 720 Pender St., Vancouver.	1½ "	75	....	J. A. Tepoorten, Vancouver.	.. ..	3·00	.....	38134	" "

* Contains iron (magnetic matter over 35 p.c.). Residue, siliceous matter.

BULLETIN No. 225—BLACK ANTIMONY.

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.		Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.		No. of Sample.	Remarks and Opinion of the Chief Analyst.
				Quantity.	Cents.	Manufacturer.	Furnisher.		Residue insoluble in HCl.	Antimony.		
DISTRICT OF VICTORIA—D. O'SULLIVAN—INSPECTOR.												
1911.									p.c.			
May 12	Black Antimony..	47595	F. J. Williams, Victoria, B.C.	1½ lb.	50	.. ..	Nat. Drug & Chem. Co. Ltd., Victoria, B.C.	... .	4·05	.....	47595	Essentially sulphide of antimony.
" 12	" ..	47596	Wm Jackson & Co., Victoria, B.C.	1½ "	50	....	Lyman Bros. & Co., Toronto.	....	2·15	.....	47596	" "
" 12	" ..	47597	Hall & Co., Victoria, B.C.	1½ "	50	.. ..	Nat. Drug & Chem. Co., Victoria.	.....	5·25	.....	47597	" "
" 12	" ..	47598	Geo. A. Fraser, Victoria, B.C.	1½ "	50	.....	Nat. Drug & Chem. Co., Victoria.	.....	4·20	.....	47598	" "
" 13	" ..	47599	Nat. Drug & Chem. Co., Victoria, B.C.	1½ "	30	.....	Nat. Drug & Chem. Co. Ltd., Montreal.	.. ..	1·80	....	47599	" "

N° 2